is negatived by the observation of URSPRUNG[35] that the pith of such plants as Sambucus and Tectona increases considerably in diameter after the wood cylinder is formed. This can be brought about only by expansion and division of the elements of the wood. The author holds that vessels can increase in diameter after they have lost their living contents.—M. A. CHRYSLER.

Waterbloom.—MÖBIUS[36] reports that for several years a waterbloom has appeared each summer in the botanical garden in Frankfurt, and that it is regularly composed of three species of Cyanophyceae: *Oscillatoria Agardhii* Gomont, *Anabaena flos-aquae* Bréb., and *Clathrocystis aeruginosa* Henfrey. The appearance of Oscillatoria in the association has not been noted hitherto. An abnormal form of *Cladophora crispata* (Roth.) Kütz. is also described.—CHARLES J. CHAMBERLAIN.

Abnormal mosses.—Two interesting abnormalities are described by GYÖRFFY,[37] collected in the High Tatra. A specimen of *Plagiobryum demissum* Lindb. shows the seta forking at the apex and carrying two perfect capsules; and one of *Polytrichum alpinum* L. has two setae, each carrying a normal capsule, both covered by a single calyptra. BRUCH records a like case in *P. juniperinum.* Obviously these forms have arisen from a single egg.—C. R. B.

Respiration.—KOSTYTSCHEW declares that in the aerobic respiration of the leaves of seed plants which contain mannit, hydrogen is produced; but in anaerobic respiration, even when very vigorous, not a trace is set free.[38] The experiments were designed to test the results of MUNTZ (1876) and DELUCA (1878), which antedated bacteriological knowledge, that H is produced by mannitiferous fungi and seed plants in anaerobic respiration.—C. R. B.

Anatomy of Urticaceae.—RENNER[39] has published a detailed account of the anatomy of Artocarpeae and Conocephaleae, paying special attention to Ficus. A systematic presentation of the tribes follows, the anatomical structure being used as a basis of discussion.—J. M. C.

---

35 URSPRUNG, A., Ueber die Dauer des primaren Dichenwachstums. Ber. Deutsch. Bot. Gesells. **24**:489–497. 1906.

36 MÖBIUS, M., Algologische Beobachtungen über eine Wasserblüthe und eine Cladophora. Hedwigia **46**:279–287. 1907.

37 GYÖRFFY, I., Bryologische Beiträge zur Flora der Hohen Tatra. IV. Hedwigia **46**:262. 1907.

38 KOSTYTSCHEW, S., Zur Frage über die Wasserstoffausscheidung bei der Atmung der Samenpflanzen. Ber. Deutsch. Bot. Gesells. **24**:436–441. 1906.

39 RENNER, OTTO, Beiträge zur Anatomie und Systematik der Artocarpen und Conocephaleen, insbesondere der Gattung Ficus. Bot. Jarb. **39**:319–448. 1907.